

Appl. No. 10/055,279
Reply to Office Action dated 8/19/05

REMARKS

Reconsideration is requested.

In this response, claims 1, 12, 13, 21, and 22 have been amended. Claims 1-22 are pending.

In the instant Office Action, claim 13 was objected to for having minor informalities, claims 1, 21-22 were rejected under 35 USC 112, second paragraph, and claims 1-22 were rejected under 35 USC §102(b) as being anticipated by U.S. Patent No. 5,634,084 to Malsheen et al. ("Malsheen"). Claim 13 has been amended as suggested by the Examiner and is therefore believed to have overcome such objection. Similarly, claims 1, 21-22 have been amended and are therefore believed to have overcome 35 USC 112, second paragraph rejections.

Applicants respectfully traverse rejection of claims 1-22 under 35 USC §102(b) as being anticipated by Malsheen. The Office Action asserts that Malsheen teaches all the elements of claim 1 and refers to Malsheen's col. 7, line 20 to col. 8, line 54 in support of such assertion. Applicants traverse the rejection in view of the following:

MPEP §2131, which recites, in part, that:

To anticipate a claim, the reference must teach every element of the claim. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

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Claim 1 recites a system for matching one or more abbreviations and one or more definitions, comprising abbreviation pattern generation process that generates one or more abbreviation patterns corresponding to candidate abbreviations, and a definition pattern generation process that generates one or more definition patterns corresponding to the candidate definitions.

Malsheen discloses abbreviation and acronym/initialism expansion procedures for a text to speech reader. Malsheen uses a text-to-speech synthesizer that employs a text to speech converter, a text reader control procedure, a classifier procedure, an abbreviation expansion procedure, and an acronym expanding procedure.

Malsheen's abbreviation/acronym expansion procedures are for generating natural pronunciation of words. For example, when Malsheen's system meets "IBM" in a text, the system pronounces "eye-bee-em", and likewise, it pronounces, "California" when it encounters "ca". Malsheen refers to such procedure as abbreviation/acronym expansion. Malsheen's system uses precompiled abbreviation/acronym expansion dictionaries for such task. See the Abstract. Malsheen's col. 7, line 20 to col. 8, line 54 provides further clarification for such and no more.

For example, at col. 7, lines 20-25, Malsheen recites "after the text classification procedure 136 completes processing of a paragraph, the Text Reader Control procedure 132 calls the Text Expander procedure 140, which receives the initial text in the paragraph as well as the classification arrays 138 generated by the Text Classifier procedure 136." Further, Malsheen's col. 7, lines 63-66 recite "any word not processed by the Number Expander and not found in the table of frequently occurring unambiguous words is next processed by looking it up in the abbreviation table 146...."

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Malsheen fails to teach or suggest an abbreviation pattern generation process that generates one or more abbreviation patterns corresponding to candidate abbreviations, and a definition pattern generation process that generates one or more definition patterns corresponding to the candidate definitions as recited in the claimed invention.

The claimed invention finds pairs of abbreviation and a definition (e.g., full form). There is no precompiled dictionary as disclosed in Malsheen. Thus, for example, the claimed invention not only matches "IBM" and "International Business Machines", but also all three letter acronyms from three word fullforms. In other words, the claimed invention does not match individual abbreviations/acronyms and their fullforms, but matches abbreviations with a certain abbreviation pattern with fullforms with a certain definition pattern as recited in claim 1.

In Malsheen, "abbreviation expansion" is performed by simply looking up an abbreviation in a dictionary and returning the fullform. Further, Malsheen's "rule" refers to a disambiguation rule attached to a dictionary entry for a specific abbreviation and specifies a condition for selecting a correct fullform for an ambiguous abbreviation. For example, in Malsheen, abbreviation "mo" could mean "Missouri", "Monday" or "month" depending on its context. The rule in the abbreviation dictionary specifies different contextual information for different meanings. See Malsheen's col. 7, lines 20 to col. 8, line 54. Such distinctions have been clearly disclosed in the present specification on page 4, lines 1-12.

Thus, unlike Malsheen, the claimed invention may generate multiple possible definitions for an abbreviation from a document. See claim 1 of the present invention. Also see page 9, lines 10-15 of the present specification.

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In view of the above, Malsheen fails to teach or suggest all the elements of claim 1. Accordingly, there can be no anticipation of claim 1. Claim 1 is therefore allowable over Malsheen. Withdrawal of rejection of claim 1 is respectfully urged.

Claims 2-20 depend from claim 1 and further limit the scope of claim 1 in a patentable sense. Claims 2-20 are therefore allowable. Further, claim 2 is patentably distinct in view of the following additional comments:

In Malsheen, a definition refers to a pronunciation of an abbreviation selected from potentially multiple pronunciations found in a dictionary. The matching algorithms implement the disambiguation rules. In the claimed invention, a definition is a fullform expansion found in textual context of an abbreviation. Claim 2 clearly recites, *inter-alia*, "a set of abbreviation rules tat correlate abbreviation patterns to definition patterns using one or more formation rules..."

Claims 21 and 22 are allowable at least for similar reasons set forth above with respect to claim 1.

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CONCLUSION

For all the reasons advanced above, Applicants respectfully submit that the application is in condition for allowance, and action to that end is respectfully requested. If the Examiner's next anticipated action is to be anything other than a Notice of Allowance, the undersigned respectfully requests a telephone interview before issuance of any such subsequent action.

Respectfully submitted,

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By: K. Sathesh
Satheesh K. Karra
Reg. No. 40,246